

ABSTRACT OF THE DISCLOSURE

A method of fabricating a semiconductor device capable of inhibiting a silicon layer from agglomerating in a molten state without patterning the silicon layer is provided. This method of fabricating a semiconductor device comprises steps of forming a silicon layer to be in contact with at least either the upper surface or the lower surface of a first film having a contact angle of not more than about 45° with respect to molten silicon and crystallizing the silicon layer after melting the silicon layer by heating the silicon layer with a continuously oscillated electromagnetic wave.